CA45P 型片式固体电解质钽电容器

Type CA45P Chip Solid Electrolytic Tantalum Capacitor

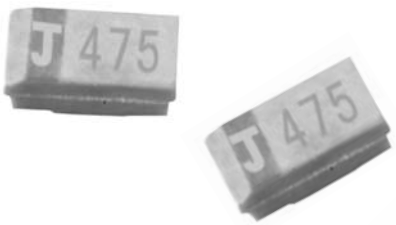
执行标准Executive Standard：Q/MM131A-2010

RoHS COMPLIANT

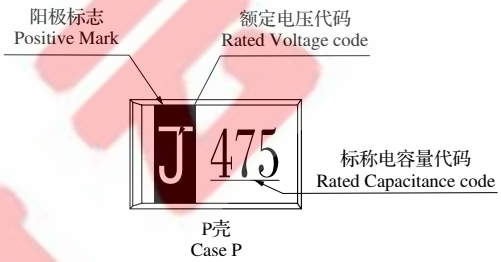
特征与用途 Characteristics and Usage

- 模压封装、密封性好、片式、**超小体积**、重量轻、极性电容器；
- 电性能优良、稳定可靠、**等效于AVX公司TAJ系列R壳产品**；
- 适用于移动通讯、摄像机、程控交换机、计算机、汽车电子等各种电子设备的表面贴装直流或脉动电路。

- ☐ Molded, good sealability, chip, **super small profile**, light weight, polarized capacitor.
- ☐ Good electrical performance, stable and reliable, **equivalent to case R of TAJ series** of AVX.
- ☐ The product is suitable to surface mounted direct current or pulsating circuit in various electronic equipments for mobile communication, vidicon, program controlled exchanger, computer, and auto electronics.



标志 MARKING:



主要技术性能 Main Technical Performance

- 温度范围：-55℃～125℃（>85℃时，施加降额电压使用）；
- 额定电压、降额电压、标称电容量：见表3；
- 电容量允许偏差：±10%、±20%；
- 等效串联电阻及高低温特性：见表3；
- 外形尺寸及外壳代号：见图1和表1；
- 额定电压、标称电容量代码：见表2。

- ☐ Temperature range: -55℃~125℃ (when above 85℃, derated voltage is applied) ;
- ☐ Rated voltage, derated voltage and rated capacitance see Table 3;
- ☐ Capacitance tolerance: ±10%; ±20%;
- ☐ ESR and Characteristic at low and high temperature: see table 3;
- ☐ Physical dimension and case code: see Figure 1 and table 1.
- ☐ Rated voltage and rated capacitance code ; see table 2.

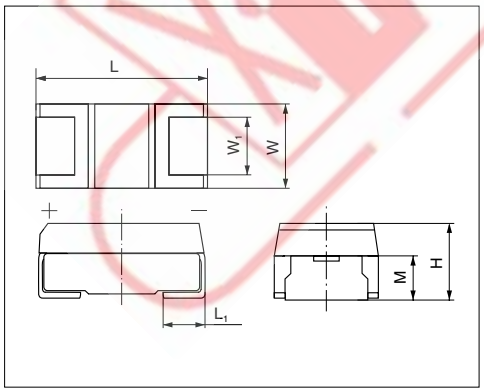


图 1

表1 电容器的外形尺寸 Table 1 Physical dimension

外壳代号 Case code		外形尺寸 mm Physical dimension					
新云 XinYun	EIA	L	W	H	L_1	W_1	M
P	2012-12	2.0±0.2	1.25±0.2	1.2±0.2	$0.5^{0}_{-0.1}$	0.9±0.1	$0.7^{+0.1}_{0}$

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表2 额定电压、标称电容量代码

Table 2 Rated voltage and rated capacitance code

额定电压 Rated voltage V	2	4	6.3	10	16	20	25	35								
代码 Code	e	G	J	A	C	D	E	V								
标称电容量 Rated Capacitance μF	0.1	0.15	0.22	0.33	0.47	0.68	1.0	1.5	2.2	3.3	4.7	6.8	10	15	22	33
代码 Code	104	154	224	334	474	684	105	155	225	335	475	685	106	156	226	336

表3 电容器的额定电压、降额电压、标称电容量、等效串联电阻及高低温特性

Table 3 Rated voltage, derated voltage, rated capacitance, ESR and characteristic at low and high temperature

标称电容量 Rated capacitance μF	等效串联电阻 ESR max 100KHz 25℃ Ω	直流漏电流DCL max μA			电容量变化范围 Capacitance change range %		损耗角正切 max Dissipation factor max %		
		+25℃	+85℃	+125℃	−55℃/+85℃	+125℃	−55℃	+25℃	+85℃/+125℃
额定电压**2V**（降额电压**1.3V**）Rated voltage 2V (derated voltage 1.3V)									
4.7	20.0	0.5	5	6.3	±10	±15	9	6	9
6.8	20.0	0.5	5	6.3	±10	±15	9	6	9
10	10.0	0.5	5	6.3	±10	±15	9	6	9
15	8.0	0.5	5	6.3	±10	±15	9	6	9
22	6.0	0.5	5	6.3	±10	±15	9	6	9
额定电压**4V**（降额电压**2.5V**） Rated voltage 4V (derated voltage2.5V)									
2.2	25.0	0.5	5	6.3	±10	±15	9	6	9
3.3	20.0	0.5	5	6.3	±10	±15	9	6	9
4.7	12.0	0.5	5	6.3	±10	±15	9	6	9
6.8	10.0	0.5	5	6.3	±10	±15	9	6	9
10	8.0	0.5	5	6.3	±10	±15	9	6	9
15	6.0	0.6	6	7.5	±10	±15	9	6	9
22	4.0	0.9	9	11	±15	±20	25	18	25
33	4.0	1.3	13.2	16.5	±15	±20	25	18	25
额定电压**6.3V**（降额电压**4V**） Rated voltage 6.3V (derated voltage 4V)									
1.5	25.0	0.5	5	6.3	±10	±15	9	6	9
2.2	20.0	0.5	5	6.3	±10	±15	9	6	9
3.3	12.0	0.5	5	6.3	±10	±15	9	6	9
4.7	10.0	0.5	5	6.3	±10	±15	9	6	9
6.8	8.0	0.5	5	6.3	±10	±15	9	6	9
10	6.0	0.6	6	7.5	±10	±15	9	6	9
额定电压**10V**（降额电压**6.3V**） Rated voltage 10V (derated voltage 6.3V)									
1.0	25.0	0.5	5	6.3	±10	±15	6	4	6
1.5	20.0	0.5	5	6.3	±10	±15	9	6	9
2.2	12.0	0.5	5	6.3	±10	±15	9	6	9
3.3	10.0	0.5	5	6.3	±10	±15	9	6	9
4.7	8.0	0.5	5	6.3	±10	±15	9	6	9
6.8	5.2	0.7	6.8	8.5	±12	±18	9	6	9
10	6.0	1.0	10	12.5	±12	±18	22	18	22

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续表3 Table 3-Continued

标称电容量 Rated capacitance μF	等效串联电阻 ESR max 100KHz 25℃ Ω	直流漏电流DCL max μA			电容量变化范围 Capacitance change range %		损耗角正切 max Dissipation factor max %		
		+25℃	+85℃	+125℃	-55℃/+85℃	+125℃	-55℃	+25℃	+85℃/+125℃
额定电压**16V**（降额电压**10V**） Rated voltage 16V (derated voltage 10V)									
0.68	18.0	0.5	5	6.3	±10	±15	6	4	6
1.0	14.0	0.5	5	6.3	±10	±15	6	4	6
1.5	12.0	0.5	5	6.3	±10	±15	9	6	9
2.2	10.0	0.5	5	6.3	±10	±15	9	6	9
3.3	8.0	0.5	5.2	6.6	±10	±15	9	6	9
额定电压**20V**（降额电压**13V**） Rated voltage 20V (derated voltage 13V)									
0.1	25.0	0.5	5	6.3	±10	±15	6	4	6
0.15	25.0	0.5	5	6.3	±10	±15	6	4	6
0.22	25.0	0.5	5	6.3	±10	±15	6	4	6
0.33	20.0	0.5	5	6.3	±10	±15	6	4	6
0.47	18.0	0.5	5	6.3	±10	±15	6	4	6
0.68	14.0	0.5	5	6.3	±10	±15	6	4	6
1.0	12.0	0.5	5	6.3	±10	±15	6	4	6
1.5	10.0	0.5	5	6.3	±10	±15	9	6	9
2.2	6.0	0.5	5	6.3	±12	±18	12	10	15
额定电压**25V**（降额电压**16V**） Rated voltage25V (derated voltage 16V)									
0.15	20.0	0.5	5	6.3	±10	±15	9	6	9
0.22	21.0	0.5	5	6.3	±10	±15	9	6	9
0.33	17.0	0.5	5	6.3	±10	±15	9	6	9
0.47	15.0	0.5	5	6.3	±10	±15	9	6	9
0.68	13.0	0.5	5	6.3	±10	±15	9	6	9
1.0	8.0	0.5	5	6.3	±12	±18	10	8	12
额定电压**35V**（降额电压**20V**） Rated voltage35V (derated voltage 20V)									
0.1	29.0	0.5	5	6.3	±10	±15	9	6	9
0.15	24.0	0.5	5	6.3	±10	±15	9	6	9
0.22	21.0	0.5	5	6.3	±10	±15	9	6	9
0.33	17.0	0.5	5	6.3	±10	±15	9	6	9
0.47	15.0	0.5	5	6.3	±10	±15	9	6	9

注Note：1.电容量、损耗角正切测量条件：测量电压：$U_{\sim}=2.2^{0}_{-1.0}$V，$U_{\sim}=1.0^{0}_{-0.5}$V（有效值）；测量频率：（100±5）Hz。
Measuring condition of capacitance and dissipation factor: measuring voltage, $U_{\sim}=2.2^{0}_{-1.0}$V, $U_{\sim}=1.0^{0}_{-0.5}$V（rms）, measuring frequency:（100±5）Hz.

2.漏电流测量条件：施加额定电压测量，充电时间不超过5min（测量125℃漏电流时，施加降额电压测量）。
DCL measuring condition: rated voltage is applied. Charging time does not exceed 5 minutes(when measuring leakage current at 125℃,derated voltage is applied).

3.等效串联电阻（ESR）测量条件：测量频率：（100±5）KHz；$U_{\sim}=2.2^{0}_{-1.0}$V，$U_{\sim}=1.0^{0}_{-0.5}$V（有效值）。
ESR measuring condition: measuring frequency:（100±5）KHz；$U_{\sim}=2.2^{0}_{-1.0}$V，$U_{\sim}=1.0^{0}_{-0.5}$V (rms).